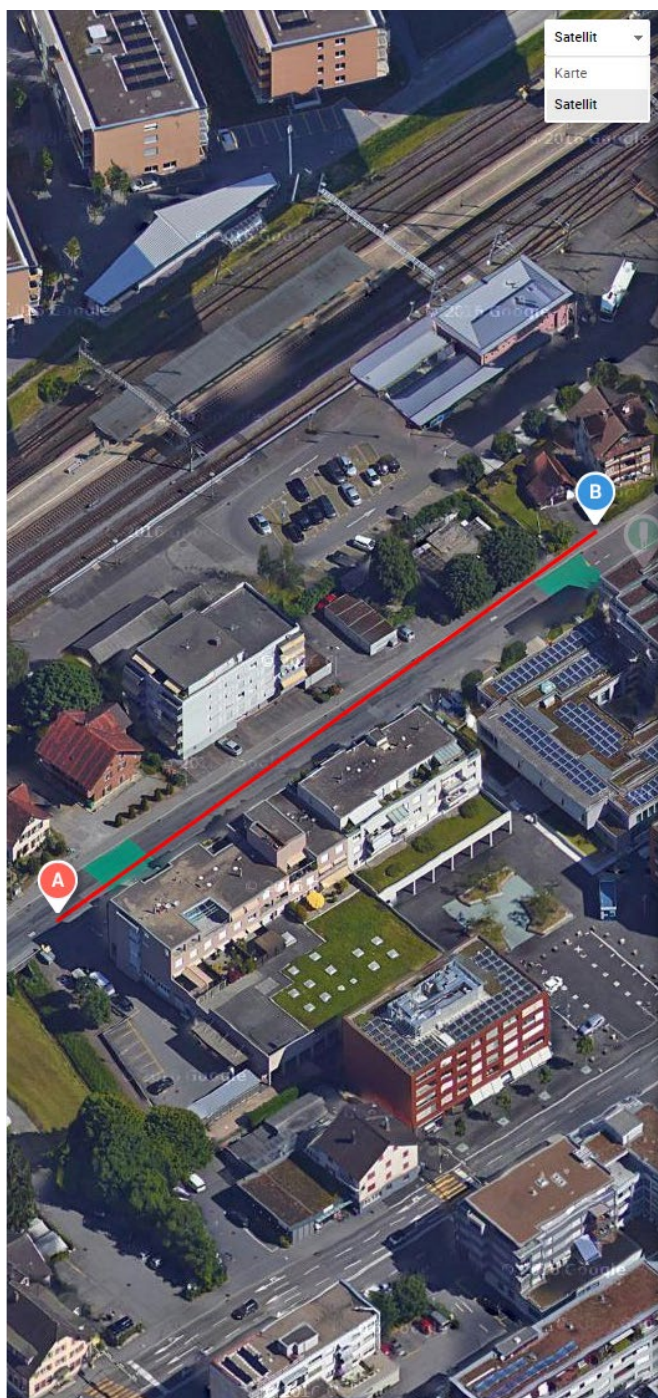




HYDRO

# PRECISION LEAK DETECTION

ORTOMAT pilot project – auto-correlating MTC technology

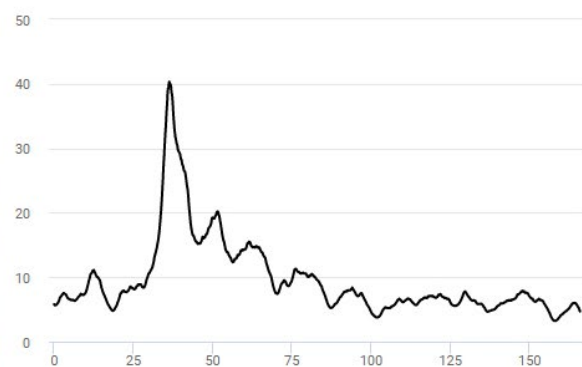


### SELECTED MARKER

1.	Pos003	85	03/04/17 04:00:00
2.	Pos001	4.1	03/04/17 04:00:00

### EVALUATION

Leak from: 38 m Leak from: 128 m



### LINE DATA

107	Cast Iron, ø100, 1317 m/s
59	Ductile Iron, ø150, 1199 m/s



ZEROWATERLOSS  
vonroll-hydro.world

## Digital network monitoring – Swiss engineered, Swiss made

A leak measuring 8 mm in diameter in a system with a mains pressure of 6 bar results in an annual loss of 36'880 m<sup>3</sup> of water. In addition to the direct costs of the water loss, the cost of the subsequent damage must also be taken into consideration, for example subsurface erosion of transport routes and the ingress of microbes and other substan-

ces. With our 'ORTOMAT-MTC' pilot project, vonRoll hydro can show you and your employees how easy it now is to detect the precise location of a leak, how quickly leak detection pays off and how you and your employees can benefit from the expertise of the leading leak detection specialists.



We charge CHF 3'500 for the pilot project.

### What we provide

- Project planning with 20 measuring points using a map of your water supply
- Installation of 20 ORTOMAT-MTC data loggers in the space of two weeks
- Installation of the visualisation and evaluation software HYDROPORT on your system
- Data transfer to existing mobile networks (ORTOMAT technology does not require you to have your own networks and is therefore more reliable and cost-effective than other systems)
- Data evaluation and leak detection
- Precision detection of leak location by vonRoll leak detection specialists
- Final report with illustration of the detected leaks
- Suggested priorities for repair works
- Payback calculation

### Outcome and benefits for you

- Employee motivation thanks to practical training using the leading technical mains monitoring and leak detection system, ORTOMAT-MTC, provided by the very best vonRoll specialists (you can determine the number of participants)
- Insight into your drinking water pipe network based on the status report, as well as information about leaks and valve defects in the tested area
- Simple scheduling of leak repairs thanks to the indicative overview of the repair urgency based on the ORTOMAT specifications on leak sizes
- Save resources by reducing water loss (payback calculation)
- One year's free use of HYDROPORT as the basis for efficient mains management
- vonRoll hydro system discount: If you purchase vonRoll system components (pipes, hydrants, valves and fittings, covers and grates, services) to the amount of at least CHF 90'000 or at least 30 ORTOMAT-MTC loggers, within 24 months of carrying out the pilot project, we will discount the complete cost of the pilot project.

Have we sparked your interest? Contact your vonRoll hydro partner or send an e-mail to one of the signatories below. We would be delighted to discuss your pilot project with you.

vonRoll hydro (suisse) ag

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Director ZERO WATERLOSS



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Water supply

Surname, First name

Address

Postcode, Town/City

Telephone

E-mail

## WATER LOSSES

Invisible defect, huge consequences

Water leak sites are often invisible on the surface for a long period of time. This can result in serious consequences and hazards for people and the environment. The loss table shows that even small leaks can be responsible for astonishing water losses.

### WATER LOSS TABLE

Mains pressure	Leak size	Water loss		
		l/min	m <sup>3</sup> /day	m <sup>3</sup> /year
in bar	Diameter in mm			
10.0	2	7.0	10.0	3 650
	4	27.0	39.0	14 230
	8	100	144.0	52 580
6.0	2	4.8	7.0	2 550
	4	18.0	26.0	9 490
	8	70.0	101.0	36 880
3.0	2	3.2	4.6	1 650
	4	12.0	17.2	6 190
	8	48.0	69.1	24 870
1.5	2	1.8	2.5	900
	4	7.0	10.0	3 600
	8	27.0	38.8	13 968

Note: Comparison values of water losses in relation to pressure and diameter of the leak.